



OFFICE OF INSPECTOR GENERAL

AUDIT OF USAID/HAITI'S NEW SETTLEMENT CONSTRUCTION ACTIVITIES

AUDIT REPORT NO. 1-521-14-007-P
APRIL 14, 2014

SAN SALVADOR, EL SALVADOR



Office of Inspector General

April 14, 2014

MEMORANDUM

TO: USAID/Haiti Mission Director, John Groarke

FROM: Regional Inspector General/San Salvador, Jon Chasson

SUBJECT: Audit of USAID/Haiti's New Settlement Construction Activities
(Report No. 1-521-14-007- P)

This memorandum transmits our final report on the subject audit. In finalizing the report, we carefully considered your comments on the draft and have included them in their entirety in Appendix II. The report contains eight recommendations to help improve USAID/Haiti's implementation of its new settlement construction activities.

The mission agreed with six of the eight recommendations, disagreeing with Recommendation 4 and not stating its position on Recommendation 5; made management decisions on all the recommendations; and took final action on Recommendation 8. We acknowledge the mission's management decisions on all the recommendations and final action on Recommendation 8. We do not agree with the mission's management decisions on Recommendations 4 and 5.

Please provide the Audit Performance and Compliance Division in the USAID Office of the Chief Financial Officer with the necessary documentation to achieve final action on the remaining seven recommendations.

Thank you and your staff for the cooperation and courtesies extended to us during this audit.

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Abbreviations

The following abbreviations appear in this report:

ADS	Automated Directives System
COR	contracting officer's representative
CPARS	Contractor Performance Assessment Reporting System
DLA 1.5	Declared Land Area 1.5
EMPR	environmental mitigation plan and report
FAR	Federal Acquisition Regulation
RIG	Regional Inspector General

SUMMARY OF RESULTS

Haiti has a vast need for permanent shelter. Haiti’s housing sector sustained roughly 40 percent of the damage caused by the January 2010 earthquake, according to the government’s initial needs assessment.¹ The quake destroyed about 105,000 homes and severely damaged more than 208,000.

To address the need, in August 2011 USAID/Haiti began ambitious activities to (1) upgrade neighborhoods in Port-au-Prince, (2) build permanent housing in new settlements outside the capital, and (3) improve urban management through policy assistance to Haitian institutions.

This audit focused on the second activity—the building of new settlements in the Northern and St. Marc development corridors (shown below). The new settlements, circled in red, are located near the towns of Caracol (settlement name is Caracol-EKAM) and Cabaret (settlement name is Declared Land Area 1.5 or DLA 1.5).

U.S. Government Development Corridors in Haiti



Source: USAID/Haiti.

According to USAID/Haiti planning documents approved in August 2011, the new settlement construction activities would build up to 4,000 houses, provide 11,000 home sites, and equip the sites with basic services and infrastructure; other partners and donors would then fund the construction of houses on these sites. The mission expected these activities to cost \$55 million, with completion in December 2012.

¹ Government of Haiti, *Post-Disaster Needs Assessment*, March 2010.

By April 2012, USAID/Haiti had awarded six contracts and one cooperative agreement, with a total estimated cost of \$50.8 million; As of July 5, 2013, USAID/Haiti had obligated \$50 million and disbursed \$42 million to support these activities. The seven awards provided for the following services:

Audited Activities

Service	Location	Short-Term Goal	Overall Goal
Construction management engineering and design	• Caracol-EKAM Settlement (near Cap Haitien)	750 units	Up to 4,000 houses
	• DLA 1.5 (near Cabaret)	156 units	
Engineering and design (plans and surveying; not site preparation)	• Six settlements in the Cap Haitien Development Corridor	6,220 home sites	11,000 home sites with basic services and infrastructure
	• Seven settlements near Cabaret		

The Regional Inspector General/San Salvador (RIG/San Salvador) conducted this audit to determine whether USAID/Haiti was achieving the main goals of its new settlement construction activities: designing and building houses in Haiti.

Construction was significantly behind schedule (page 5). For that reason, the mission did not achieve its goals for constructing houses and developing home sites within budget and on schedule. As of completion of audit fieldwork in August 2013, the mission had substantially completed construction of only 816 of the planned 4,000 houses—21 percent of the goal. The mission completed engineering and design services for approximately 2,300 home sites and was evaluating proposals for site development work, but had not provided basic services and infrastructure to any of the planned 11,000 home sites. Housing units shown below were nearly completed.



**Housing units at DLA 1.5 near Cabaret (left) and Caracol-EKAM (right) near completion.
(Photos by RIG/San Salvador June 27 and 30, 2013)**

To meet its goals for houses and home sites, the mission increased new settlement funding from \$55 million to \$90 million, and pushed back the expected completion date to October 2014. However, as of July 2013, the mission had approved construction contracts for only 906 houses and issued no contracts for providing basic services and infrastructure to home sites; current

contracts provide only engineering services (planning, surveying, site preparation) at 6,220 home sites.

Further, auditors noted the following weaknesses:

- Quality control plans were insufficient for documenting materials testing and tracking deficiencies (page 6). The mission did not check at the outset whether plans outlined needed processes and contained complete instructions.
- The mission did not enforce mitigation of environmental concerns (page 9). One reason was that contractors provided conflicting assessments of how effective mitigation measures were.
- The mission did not evaluate contractors' performance as required (page 10). Performance should be evaluated annually and at the end of an award to inform future procurements and to induce excellent performance.
- The mission did not approve contractors' branding plans (page 11). The signs at one housing site did not appropriately recognize USAID's contribution.

To help strengthen oversight of settlement construction activities, RIG/San Salvador recommends that USAID/Haiti:

1. Determine whether the current targets are realistic or need to be adjusted, and document revised estimates of completion dates for the remaining houses and sites (page 6).
2. Require contractors to include in their quality control plans sufficient detail to make sure that construction projects meet the quality standards set forth in the contracts (page 8).
3. Require contractors to document all test results and make them readily available (page 8).
4. Require contractors to document and resolve all deficiencies identified and to use punch lists before asking USAID to accept completed houses (page 9).
5. Correct the problems noted with finishing the completed houses (page 9).
6. Address the inconsistencies in environmental reporting between its contractors, and implement a plan for more vigorous enforcement of environmental mitigation at the construction sites (page 10).
7. Complete the required contractor performance evaluations for all new settlement construction contracts in accordance with the Federal Acquisition Regulation and USAID's Acquisition Regulation (page 11).
8. Document its actions regarding branding plans in accordance with USAID's Automated Directives System (ADS), and obtain appropriate waivers if necessary (page 12).

Detailed findings appear in the following section. The scope and methodology are described in Appendix I. Management comments are included in their entirety in Appendix II, and our evaluation of management comments is on page 13.

AUDIT FINDINGS

Construction Was Significantly Behind Schedule

According to a USAID/Haiti plan approved in August 2011, USAID expected to build up to 4,000 houses and develop 11,000 home sites with basic services by December 2012, with total funding of \$55 million. Under the six contracts and one cooperative agreement (totaling \$50.8 million) issued by April 2012, the mission expected to build 906 houses. The contracts also provided for engineering services—such as site location, planning, and surveying—for 13 planned settlements with an estimated 6,220 home sites in preparation for houses to be constructed with funding from other donor sources.

In August 2012, mission officials increased funding for the new settlement activities from \$55 million to \$90 million and extended the completion date to October 2014. The mission provided the additional funding to address increased construction costs, design changes to increase house size, and sanitation upgrades.

As of August 2013, the mission had substantially completed construction of 816 of the 906 houses and provided engineering services for approximately 2,300 of the 6,220 sites. However, the contracts did not include the site preparation or provision of basic services and infrastructure to allow for the construction of additional houses through partnerships with other donors; the mission was still evaluating proposals for site preparation. As a result, the activities were significantly behind schedule. The following factors led to the construction delays: (1) land tenure determinations, (2) design changes, (3) work interruptions, (4) an emphasis on using local labor and products, and (5) a shortage of willing partners. These issues are described in more detail below.

- *Land tenure determinations.* USAID/Haiti planned to build on both government and private land but had difficulty determining land ownership. The mission eventually decided to build only on government land but still encountered delays verifying land ownership, as the process allowed people 2 months to come forward with claims for the land.
- *Design changes.* The design envisioned in the early stages was a “core” house, or modified version of temporary shelters. The design featured one room, a small kitchen, and a toilet. However, at the request of the Government of Haiti, USAID/Haiti changed the design for houses in Caracol-EKAM, replacing double-vaulted pit latrines with full-flush toilets, adding larger lots, and including one finished bedroom and an open concrete slab for a second bedroom to be built by the owner. USAID/Haiti also changed the design of DLA 1.5 to add an open slab for a second bedroom. The changes required revision of the plans and engineering designs.
- *Work interruptions.* Construction at the Caracol-EKAM site was interrupted on several occasions by inclement weather, labor disputes, and local unrest. The construction site was shut down many times, for a total of 18 days between October 2012 and June 2013, because of labor disputes and protests. Site security became a significant problem. Unrest and protests occurred for a variety of reasons, such as the perception that the number of local workers employed at the site was too low and rumors that the houses would be given

to impoverished families from Port-au-Prince instead of to local families. One of the subcontractors did not always pay its employees promptly, resulting in additional protests.

- *Emphasis on using local labor and products.* The construction contractors tried to use local labor whenever possible. These efforts provided a needed boost to the local economies and developed skills locally but required additional worker training and oversight, which slowed the pace of construction. At the Caracol-EKAM site, the house design featured locally made wooden windows; they required additional time and effort for Haitian producers to manufacture.
- *Shortage of willing partners.* USAID/Haiti planned to develop 11,000 sites and services and partner with nongovernmental organizations to fund the construction of houses on these sites, but the mission had difficulties finding partners for the construction projects. The organizations were reluctant to deal with the land tenure and construction challenges in Haiti. The mission has entered into agreements or memorandums of understanding with three partners that will contribute to the construction of more than 4,000 additional houses on sites developed by USAID; however, as of August 2013, construction had not begun on these sites.

These issues put the activities significantly behind schedule and the mission in a poor position to achieve goals within budget and on schedule. The delays have hampered the delivery of the intended benefits, and thousands of Haitians are still living in temporary shelters waiting for permanent housing. Given these serious challenges, it is unlikely that USAID will be able to meet its original goals even by the new target dates. The mission is revisiting its permanent shelter strategy to consider alternative housing approaches with the remaining funds. To ensure that the mission addresses these key considerations, we make the following recommendation.

Recommendation 1. *We recommend that USAID/Haiti determine whether the current targets are realistic or need to be adjusted and document revised estimates of completion dates for the remaining houses and sites.*

Quality Control Documentation Was Insufficient

According to ADS 202.3.6, a major task of contracting officer's representatives (CORs) and development teams is to monitor the quality and timelines of a contract's key outputs. The guidance states, "Delays in completing outputs or problems in output quality provide an early warning that results may not be achieved as planned," and that "early action in response to problems is essential in managing for results."

USAID/Haiti executed construction contracts with two companies, CEMEX-Haiti and THOR Construction Inc., to provide sustainable, durable, structurally sound, safe, and environmentally friendly houses to needy families. USAID/Haiti also required the contractors to develop quality control plans for the construction. The CEMEX quality control plan was to lay out methods and procedures for conforming all material and completed construction to contract requirements. THOR's quality control plan was to ensure that all work was done without any quality defects and include an inspection and monitoring process that would improve efficiency, eliminate waste, foster accountability, and provide a high-quality project.

However, the quality control plans were not adequate to ensure that contractors documented, tracked, and corrected deficiencies.

Tests and quality control activities were not well documented. CEMEX's quality control plan requires it to prepare daily quality control reports whenever it engages in any construction activity. The individual performing the test should document test results to ensure compliance with the requirements of the design and construction specifications. This documentation will consist of "records prepared by Quality Control personnel, testing laboratories, the design and construction personnel and any subcontractors." Although CEMEX's plan required documentation, THOR's quality control plan did not include requirements for documenting any testing or quality control activities.

Test records were incomplete. The testing log kept by CEMEX inspectors at DLA 1.5 showed they had done the slump test, which measures the workability of fresh concrete.² Yet the log gave no details of the test results. THOR's testing log consisted of a list on a legal pad with some handwritten slump test results. THOR personnel could not explain whether the list was complete or what happened to material that did not meet the requirements. It was also impossible to match the slump tests with the appropriate concrete tests performed. Neither CEMEX nor THOR could provide a complete list of slump tests and other tests performed at the time of our site visits.

Deficiencies were not always tracked. CEMEX's quality control plan required that deficiencies be tracked in a log with columns for the project/task, item number, date, initiator, description, responsible party, date of corrective action, reinspection results, and date of approval of corrective action. CEMEX and PHS Group Inc., the construction management contractor for DLA 1.5, identified concrete test results that required a follow-up test, but they had not determined which houses needed to be retested or who would perform the follow-up tests.

CEMEX also required a completion inspection of the items on the punch list, a list of tasks to be done or fixed promptly that is compiled during a walk-through when a project is substantially complete) to verify that deficiencies were corrected. THOR's plan also required a punch list and verification process to ensure deficiencies were corrected. However, as of July 2013, CEMEX had not developed a punch list for DLA 1.5, and the one THOR developed for Caracol-EKAM was being revised. Both projects were scheduled to be completed by August 2013.

Thus, despite the required attention to quality, many houses had noticeable problems. Inconsistencies in the placement of toilet tanks could eventually lead to damage; the second varnish coat to prevent wood damage on the windows and doors at several houses was not done (as shown in the following photo), and the doorknobs at many houses were weak and easy to tamper with. Finally, the open slab of the house foundations (left open to provide room for future expansion by the owner) at Caracol-EKAM had reinforcing bars thrusting up from the ground, posing a safety hazard to the community (as shown in the lower photo on the next page).

² The test involves inverting a mold filled with concrete over a flat surface. The slump is the difference between the height of the mold and the highest point of the concrete.



Shutters on house at Caracol-EKAM lack a second coat of varnish to prevent wood damage. (Photo by RIG/San Salvador, July 1, 2013)



Reinforcing bars on open slab intended for future expansion pose a safety hazard in Caracol-EKAM. (Photo by RIG/San Salvador, July 1, 2013)

These problems occurred because mission personnel did not review the contractor's quality control procedures to ensure that all necessary steps were adequately documented. Inadequate quality control procedures can lead to the use of substandard material in USAID-funded construction projects, affecting structural integrity. To address this concern, we make the following recommendations.

Recommendation 2. *We recommend that USAID/Haiti require contractors to include detailed instructions in their quality control plans to make sure that construction projects meet the quality standards set forth in the contracts.*

Recommendation 3. *We recommend that USAID/Haiti require its contractors to document all test results and make them available on request.*

Recommendation 4. *We recommend that USAID/Haiti require its contractors to document and resolve identified deficiencies, and use punch lists before asking USAID to accept completed houses.*

***Recommendation 5.** We recommend that USAID/Haiti correct the problems noted with finishing the completed houses.*

Mission Did Not Enforce Mitigation of Environmental Concerns

USAID's environmental procedures, codified in Title 22 of the Code of Federal Regulations, Part 216, "Environmental Procedures," require that designers consider the impact of USAID's activities on the environment and adopt appropriate environmental safeguards for all activities. Also, ADS Chapter 204 requires missions to conduct ongoing monitoring and evaluation of environmental mitigation measures designed for the activities. For the two settlement sites, USAID/Haiti completed environmental assessments that identified potential environmental impacts. According to the terms of the contract, CEEPCO Contracting LLC, the contractor in charge of construction management at Caracol-EKAM, was responsible for providing USAID/Haiti with an environmental mitigation plan and report (EMPR) and seeing that the mitigation measures were implemented and monitored.

CEEPCO reported on the effectiveness of environmental mitigation in its monthly progress reports and EMPR to USAID. CEEPCO consistently rated certain environmental mitigation measures low or very low in terms of effectiveness, but the construction contractor THOR's efforts to address the environmental problems resulted in only temporary improvements. For example, CEEPCO noted in the March 2013, April 2013, and subsequent reports that hazardous wastes are "not being properly stored and are the cause of soil and possibly water contamination." In the January 2013 report, CEEPCO reported that "notice of nonperformance was to be given to guilty contractors." However, actions taken by the mission and THOR, the contractor, were insufficient, as evidenced by the continuing concerns raised in the monitoring reports.

CEEPCO also made the following observations in the EMPR:

1. Cut materials from the site excavation area were disposed of in piles and needed to be leveled to land owners' specifications.
2. Drip pans were not installed at the dispensing area for petroleum products.
3. Potential pollutants were not adequately stored.
4. Used oils and lubricants were not recycled.
5. A drainage system was not yet developed.
6. Plans for monitoring water quality did not exist during construction.

The mission environmental officer conducted regular visits to the Caracol-EKAM and DLA 1.5 settlements and documented his assessments in trip reports. In March 2013, during a visit to Caracol-EKAM, the officer noted, "There has been considerable progress made at this site during the past 6 months in both construction and environmental compliance practices." However, in July 2013 he reported that site conditions had deteriorated considerably since his March site visit. He noted excessive solid waste (debris and garbage) onsite and said that solid waste management had regressed rapidly in 3 months. He also noted that the May 2013 EMPR

indicated low levels of effectiveness for many of the environmental mitigation measures. His report described the lack of environmental compliance as serious and urged the contracting officer and contracting officer's representative to address the problem quickly and firmly.

CEEPCO's assessment of mitigation measures matched the mission environmental officer's but differed from THOR's. Several measures that CEEPCO evaluated as low were reported by THOR as "very effective." These inconsistencies made it unclear whether mitigation was effective.

Despite attempts to enforce the contractor's compliance and improve mitigation, problems persisted. CEEPCO issued citations to the contractor. Mission staff discussed the mitigation efforts and problem areas with the contractors during regular meetings but did not do detailed follow-up on problems reported in the EMPRs. According to mission officials, during the time of deteriorating site conditions in 2013, THOR was dealing with other pressing issues resulting from site shutdowns and protests. Still, the mission was making efforts to correct the environmental situation. Both construction contractors had begun their final cleanup in preparation for beneficiary move-in starting in September 2013.

Addressing environmental concerns promptly ensures that USAID projects are not detrimental to beneficiaries' quality of life. Hazardous waste and other materials that can contaminate the soil and water should be eliminated for health and safety reasons. Accordingly, we make the following recommendation.

***Recommendation 6.** We recommend that USAID/Haiti address the inconsistencies in environmental reporting between its contractors and implement a plan for more vigorous enforcement of environmental mitigation at the construction sites.*

Mission Did Not Evaluate Contractors' Performance

The Federal Acquisition Regulation (FAR 42.1502) requires agencies to evaluate and report on contractor performance for each contract exceeding the simplified acquisition threshold, which is currently \$150,000. USAID policy guidance also requires contracting officers and contracting officer's representatives to evaluate contractor performance at least annually and, on contract completion, provide information for future source selection and other acquisition decisions.

USAID/Haiti had not completed annual contractor performance evaluations for any of the six contracts awarded to four contractors doing new settlement construction. The evaluations were due when the contracts reached their 1-year mark, between June 2012 and April 2013.

USAID/Haiti officials had not completed the evaluations because the mission was not following the FAR requirement, and the contracting office did not follow up to advise the technical office of their responsibilities regarding the requirement until new contracting office staff arrived in May 2013. Furthermore, the contracting officer's representatives said they were unable to access the Web-based Contractor Performance Assessment Reporting System (CPARS) to complete the evaluation requirement. The staff has since sought assistance from both the contracting office and CPARS technical support in obtaining access to the system to complete the evaluations.

Regular, comprehensive, and conscientious performance evaluations can help the mission with source selection for upcoming awards. Evaluations can also serve as a significant incentive to

contractors to provide USAID with superior products and services. To underscore the need for evaluating contractor performance, we make the following recommendation.

***Recommendation 7.** We recommend that USAID/Haiti complete the required contractor performance evaluations for all new settlement construction contracts in accordance with the Federal Acquisition Regulation and USAID's Acquisition Regulation.*

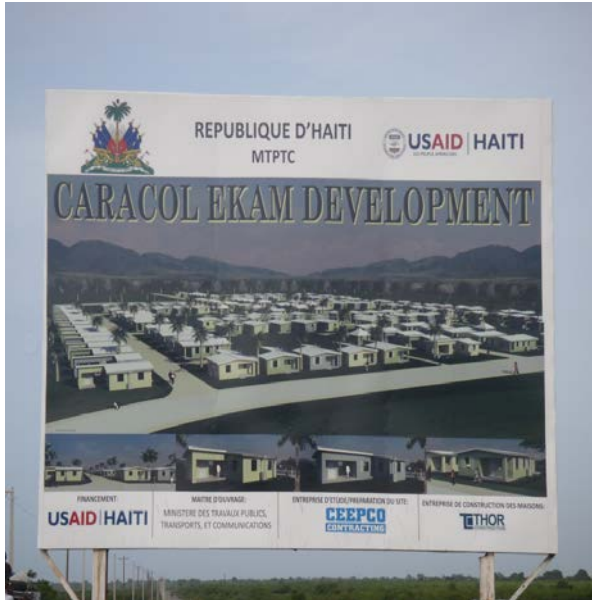
Mission Did Not Approve Contractors' Branding Plans

To make the public aware that development assistance comes from the American people, ADS 320.3.2 requires contractors to submit for approval a plan to implement USAID's branding strategy. This branding plan must address how to publicize activities. Furthermore, "Program, project, or activity sites financed by USAID contracts, including visible infrastructure projects . . . must prominently display the USAID identity."

Despite these requirements, 2 years into implementation, USAID/Haiti did not have an approved branding plan for four implementers:

- CEMEX submitted a draft branding plan during the first year, but the mission did not approve it.
- Personnel for the engineering contractor PHS were told by mission officials that branding plans were not required, despite the clear requirements in the contract.
- THOR submitted a proposed branding and marking plan, but mission officials believed that implementing it was too costly and asked THOR not to implement it. The mission had not asked THOR to revise the plan.
- CEEPCO also submitted a draft plan during the first year, but the mission did not approve it. The plan remained unapproved as of July 2013.

Although there were no approved branding plans, the mission and contractors made efforts to recognize USAID's contributions to the activities through signage. At the Caracol-EKAM and DLA 1.5 sites, the contractor had properly installed large signs to announce the work of USAID. However, the DLA 1.5 site had two small signs, one with a large hole in it, and neither sign was clearly readable (as shown on the following page). CEMEX's chief of party said USAID had asked the company to minimize the signage at the DLA 1.5 site to keep a low profile. The idea was to avoid unrest like the demonstrations and protests at the Caracol-EKAM site. However, this approach to branding was not formally documented in an approved branding plan.



The sign at Caracol-EKAM (left) appropriately recognizes USAID/Haiti, whereas the one at DLA 1.5 (right) is too small and damaged to read. (Photos by RIG/San Salvador, July 1 and June 27, 2013)

The projects did not have approved branding plans because mission officials did not act promptly to consider the contractors' submissions, document their decisions, and provide written notification to the contractors. Without an approved branding plan and without legible signs at the construction sites, USAID and the American people might not receive appropriate recognition for their assistance. Mission officials agreed that branding plans are needed and have taken steps to address this issue. To build on those steps, we make the following recommendation.

Recommendation 8. *We recommend that USAID/Haiti document its actions with regard to branding plans in accordance with USAID regulations and obtain appropriate waivers if necessary.*

EVALUATION OF MANAGEMENT COMMENTS

In its comments on the draft report, the mission agreed with six of the eight recommendations, disagreeing with Recommendation 4 and not stating its position on Recommendation 5. Having reviewed management comments, we acknowledge the mission's management decisions on all the recommendations. However, we disagree with the mission's management decisions on Recommendations 4 and 5 because the mission hasn't completed its review of the documentation for the projects to determine that all deficiencies have been corrected. Our evaluation of management comments follows.

Recommendation 1. The mission agreed to determine whether its housing targets were unrealistic. It determined they were, because of higher costs, design changes, and site conditions, and was revising the housing targets in its fiscal year 2014 performance management plan. The mission plans to update the targets every 2 years to reflect changes in scope, site conditions, availability of funds, and funding from other donors. The mission estimated it would finish updating the targets by June 30, 2014. The mission reported completing construction of 906 houses and was preparing 426 sites for houses to be constructed with funding from other donors. The site preparation for the 426 sites should be completed in the fall of 2014. Given the mission's planned actions, we acknowledge its management decision on this recommendation.

Recommendation 2. USAID/Haiti agreed to require its construction contractors in all future construction contracts over \$1 million to include detailed instructions in the quality control plans. The mission was developing a mission order on construction projects that will include the requirements for the quality control plans. The mission expected to finalize the mission order by September 30, 2014. We acknowledge the mission's management decision on this recommendation.

Recommendation 3. The mission agreed to require its construction contractors to maintain documentation of quality control tests and their results in a central location accessible to mission staff. This requirement will be included in the engineering and construction mission order the mission was developing and expected to complete by September 30, 2014. Accordingly, we acknowledge the mission's management decision on this recommendation.

Recommendation 4. The mission disagreed with the recommendation requiring contractors to document and resolve all deficiencies and to use punch lists. It did so because it believes these requirements are included in the contracts and have been met. The mission asserted that the punch lists were developed at the appropriate time at the point of substantial completion which occurred for the two housing settlements on October 31 and November 30, 2013.

We do not agree with the mission's management decision. Although the contracts have ended, the mission has not completed its review of the punch lists to determine that the deficiencies identified have been resolved.

Recommendation 5. The mission did not agree or disagree with the recommendation to correct the problems noted with the finishing steps on the completed houses. The comments stated that

the projects were completed and that the deficiencies noted in the finish work have been completed. However, we disagree with the mission's management decision—that nothing further is required—because the mission has not completed its review of documentation to determine that deficiencies have been corrected.

Recommendation 6. The mission agreed to address the inconsistencies between contractors in environmental reporting and implement a plan for more vigorous enforcement of environmental mitigation at the construction sites. Mission officials planned to address the inconsistencies in reporting by April 30, 2014. Furthermore, the mission planned to improve its monitoring of environmental mitigation by (1) requiring monthly updates highlighting issues requiring action, (2) instituting quarterly site visits by the COR and mission environmental staff, and (3) implementing a procedure to resolve any discrepancies noted in environmental monitoring, all by July 31, 2014. The mission also planned to require its CORS to attend training on environmental procedures. Given these planned actions, we acknowledge the mission's management decision on this recommendation.

Recommendation 7. The mission agreed to complete the required contractor performance evaluations for all new settlement construction contracts in accordance with acquisition regulations. Mission officials were working with the mission acquisition and assistance offices to resolve the access issues with CPARS. The target completion date for this action is April 30, 2014. We acknowledge the mission's management decision on this recommendation.

Recommendation 8. The mission agreed to document its actions regarding branding plans in accordance with USAID regulations and obtain waivers, if necessary. The mission stated that, as of January 6, 2014, CORs had documented implementers' compliance with USAID's branding and marking requirements at both settlements. The audit team reviewed the mission's memos to the file documenting its actions regarding the contractors branding plan. Accordingly, we acknowledge the mission's final action on this recommendation.

SCOPE AND METHODOLOGY

Scope

RIG/San Salvador conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions in accordance with our audit objective. We believe that the evidence obtained provides that reasonable basis.

The objective of the audit was to determine whether USAID/Haiti was achieving its main goals for new settlements construction activities: designing and constructing houses in Haiti.

As of July 2013, USAID/Haiti had awarded seven contracts and agreements valued at \$51 million for the new settlements construction activities. As of July 5, 2013, USAID/Haiti had obligated \$50 million and disbursed \$42 million for activities. The disbursed amount represents the amount tested during this performance audit.

The audit covered activities from July 2011 through July 2013. We conducted audit fieldwork in Haiti from June 25 to August 22, 2013, at USAID/Haiti, settlement construction sites in Cabaret and Caracol and at contractors' offices in Petion-Ville and Cap Haitien. We also met with local officials and community representatives in Cabaret and Caracol.

In planning and performing the audit, we assessed the following significant internal controls the mission used to monitor program activities: quality control plans; initial environmental examination and environmental compliance plans; daily and monthly progress reports; and reports of meetings and other contacts between mission officials and its contractors: CEMEX, THOR, PHS, and CEEPCO. We also reviewed and tested the quality control plans used by the contractors. We reviewed the mission's fiscal year 2012 assessment of internal controls required by the Federal Managers' Financial Integrity Act of 1982 to verify whether it cited any relevant weaknesses, and reviewed prior audit reports to identify any internal control weaknesses significant to the audit objective.

Methodology

To answer the audit objective, we interviewed officials from USAID/Haiti, PHS, THOR, CEMEX, CEEPCO, and construction subcontractors for THOR and CEMEX. We reviewed documentation including the awards, technical proposals and evaluations, contractors' quality control plans, daily and monthly progress reports, environmental assessments, financial data, and documentation of materials testing.

We verified the results of quality control tests by visiting the construction sites and reviewing supporting documentation at the contractors' offices. We selected a judgmental sample for supporting documentation of CEEPCO, CEMEX, PHS, and THOR to allow testing of all major quality control elements within the time frames allowed by the audit. Since the testing was based on a judgmental rather than a statistical sample, the results and conclusions related to documentation analysis are limited to the items tested and cannot be projected to the entire audit universe.

MANAGEMENT COMMENTS



TO: Jon Chasson, Regional Inspector General

FROM: John Groarke, Mission Director/s/

DATE: March 27, 2014

SUBJECT: Mission Response to the Draft Report of USAID/Haiti's Audit of New Settlement Construction Activities (Report No. 1-521-14-00X-P)

This memorandum represents USAID/Haiti's actions taken to address and reach management decisions in response to the recommendations reported in the draft OIG Report No. 1-521-14-00X-P for USAID/Haiti's New Settlement Construction Activities. The mission provides below its responses to the recommendations.

Recommendation 1: *We Recommend that USAID/Haiti determine whether the current targets are realistic or need to be adjusted and document revised estimates of completion dates for the remaining houses and sites.*

Mission Response:

USAID/Haiti concurs with OIG Recommendation 1. Dramatically higher actual costs—due in large part to bigger unit size, geotechnical and hydrologic conditions at two sites, and overall improvements to water and sanitation infrastructure—rendered the original estimated housing targets obsolete and therefore unrealistic. Accordingly, the Mission is adjusting and revising the estimated housing targets as part of an ongoing strategy and programmatic reviews to be reflected in the FY 2014 update of the Performance Management Plan. As needed, the Mission will continue to assess and adjust targets and completion dates on a semi-annual basis to reflect changes in scope and site conditions, availability of appropriated funds, and funding from resource partners (e.g. other donors).

All 906 houses in the first two new settlement projects in the Port-au-Prince and Northern development corridors, were completed on October 31, 2013 and November 30, 2013, respectively. Site preparation at the Terrier Rouge and Ouanaminthe sites in the Northern corridor funded by USAID, where 426 housing units will be constructed by the Government of Haiti, is currently underway and is slated to be completed in the fall of 2014.

Plan of Action and Timeline: The Mission carries out portfolio reviews on a semi-annual basis. Housing targets will be reviewed and updated as part of these and similar reviews. The updated targets will be documented in the Mission's FY 2014 update of the Performance Management Plan slated to be completed by June 30, 2014.

Recommendation 2: *“We recommend that USAID/Haiti require contractors to include detailed instructions in their quality control plans to make sure that construction projects meet the quality standards set forth in the contracts.”*

Mission Response:

The Mission concurs with OIG Recommendation 2. USAID does require contractors to provide a Quality Control/Quality Assurance (QC/QA) Plan in all construction contracts greater than \$1 million. A new Mission Order will specify that QC/QA Plans must detail the “Who, How, Where, and When” of their approach to QC/QA and also specify how the QC/QA documentation will be managed.

Plan of Action and Timeline

The Office of Infrastructure, Engineering, and Energy is developing an Engineering and Construction Mission Order to address Quality Control/Quality Assurance Plans, as well as for planning, design, procurement, implementation, and oversight, including project closeout for construction projects. The USAID/Haiti mission targets finalization of this Mission Order by September 30, 2014.

Recommendation 3: *“We recommend that USAID/Haiti require its contractors to document all test results and make them available on request.”*

Mission Response:

USAID/Haiti concurs with OIG Recommendation 3. A key section in the QC/QA Plans described above in the Mission's Plan of Action for IG Recommendation 2 addresses the management of the QC/QA documentation. In all future construction projects greater than \$1 million, contractors will be required through solicitations and in their contract to maintain QC/QA documentation in a central location immediately accessible to USAID and its designated agents. At the time of contract completion, QC/QA documentation, including all findings and approved corrective measures, will be turned over to USAID along with the as-built drawings.

Although the construction contractors' QC/QA documentation management needed improvement, the Mission would like to clarify and underscore that they carried out all the QC/QA testing required in their contracts. All testing documentation is available at the contractors' offices for further review as required. The audit report noted that the contractor was not documenting concrete slump tests, which was not the case. The housing contractors undertook a pass/fail testing methodology and documented only the failed tests. The construction management and supervision contractor for the northern construction works also kept complete records at their office in Cap Haitien. If any of the concrete delivered on site failed the slump test (i.e. did not conform to the plant order ticket form), the concrete truck was rejected. This was, however, extremely rare. For example, slump tests failed only seven times out of a total of 616 tests (1%) at one site, and the contractor did not record all 616 slump tests — only the failed

tests. In future solicitations and contracts, the Mission will specify all QC/QA requirements, including the stipulation that the contractor record all materials tests.

Plan of Action and Timeline

The USAID/Haiti Office of Infrastructure, Engineering and Energy is developing an Engineering and Construction Mission Order to provide more detailed requirements for contractor QC/QA Plans as well as for planning, design, procurement, implementation, and oversight, including project closeout, for construction projects. The USAID/Haiti mission is slated to finalize this Mission Order by September 30, 2014.

Recommendation 4: *“We recommend that USAID/Haiti require its contractors to document and resolve identified deficiencies, and implement punch lists before asking USAID to accept completed houses.”*

Mission Response: The Mission disagrees with OIG Recommendation 4 because the development of punch lists and identifying and resolving deficiencies have always been, and continue to be, a key contractual requirement for all construction projects sponsored by USAID/Haiti. Punch list development for the Northern Corridor project was undertaken June 2013 through October 2013 and for the project in the Port-au-Prince Corridor, September 2013 through November 2013. All deficiencies identified during the punch list process were corrected as required by the process.

Punch lists are traditionally prepared once the contractor has confirmed that s/he has reached substantial completion. Under the new settlements program, USAID defined substantial completion as *“the stage at which work is sufficiently complete, in accordance with the Contract Documents, to allow the Owner to occupy or utilize the Work for its intended purpose.”*

The audit report field visits were carried out in July 2013. At that time, 50% of the houses in the North of Haiti had reached the stage of substantial completion and had punch lists prepared and deficiencies rectified. After July 2013, the remaining housing construction in the North and West reached the stage of substantial completion and the construction management contractors executed the required punch lists for each project site. In accordance with this process, once all identified deficiencies on the punch list were resolved by the prime construction contractors, the punch lists were signed by the construction manager indicating that the house had passed final inspection. By November 30, 2013, all houses at both sites had completed final inspection.

Plan of Action and Timeline

Punch list documentation is already included as part of the Project Closeout Documentation, due 90 days after the project activity completion date. The Office of Infrastructure, Engineering and Energy will submit the Project Closeout Documentation to demonstrate compliance with punch list development, and resolution of deficiencies.

Recommendation 5: *“We recommend that USAID/Haiti correct the deficiencies noted with finishing the completed houses”*

Mission Response:

As noted above in the response to IG Recommendation 4, and as per the conditions of the housing contracts, all deficiencies identified during the punch list process have been corrected as required of the scheduled process. As of this date, the houses and utilities all conform to the contract specifications and relevant standards. In addition, the construction product has a one-year warranty period within which the construction contractor is required to rectify any defects that may surface as a result of their work.

Plan of Action and Timeline

USAID/Haiti has completed this action.

Recommendation 6: *We recommend that USAID/Haiti reconcile the inconsistencies in environmental reporting between its contractors and implement a plan for more vigorous enforcement of environmental mitigations at the construction sites.*

Mission Response:

USAID/Haiti concurs with OIG Recommendation 6. The Contracting Officer's Representative will meet with the Mission Environmental Officer and both private contractors to come to closure on any inconsistencies in the environmental reporting. This meeting is scheduled to take place before April 30, 2014.

Moving forward, the Mission will continue to focus on improving contractor performance through monitoring and reporting, and training:

1. Monitoring and Reporting.
 - i. Mission contracts with Construction Management and Supervision Contractors will require them to produce monthly environmental updates that highlight issues in the EMPR requiring action by the construction contractor, inclusive of photos and other relevant visual aids.
 - ii. As part of their field monitoring requirements, the Contracting Officer's Representative (COR) and Mission Environmental Officer (or designee) will conduct joint quarterly visits to determine environmental compliance.
 - iii. When inconsistencies are noted, the COR will convene all concerned parties (including the Mission Environmental Officer) within one week in order to rectify the problem; minutes will be taken to capture the discussion and agreed upon remedies.
2. Training.
 - a. CORs will be required to take the basic USAID Environmental Procedures (Reg. 216) training course as soon as possible after being certified, and to participate in a refresher course every 3 years. CORs not trained in Reg. 216 and who are assigned a project that pose high environmental impacts will be required to take

the course as soon as possible and be paired with an alternate that has had this training. In February 2014, USAID/Haiti organized and presented two, 1-week training courses on Reg. 216 in which twenty (20) Mission CORs were trained.

Plan of Action and Timeline

The Mission will conduct Reg. 216 Training on an annual basis. CORs will be required to take the basic USAID Environmental Procedures (Reg. 216) training course as soon as possible after being designated as COR, if not before, and to participate in a refresher course every 3 years. For FY2014, two trainings have already been held and 20 CORs trained.

Recommendation 7: *We recommend that USAID/Haiti complete the required contractor performance evaluations for all new settlement construction contracts in accordance with the Federal Acquisition Regulation and USAID's Acquisition Regulation*

Mission Response: USAID/Haiti concurs with this recommendation.

Plan of Action and Timeline

The relevant CORs are working with the Contracting Officer and will complete the CPARs by no later than April 30, 2014.

Recommendation 8: *We recommend that USAID/Haiti document its actions with regard to branding plans in accordance with USAID regulations and obtain appropriate waivers, if necessary.*

Mission Response: The Mission concurs with IG Recommendation 8. As of January 6, 2014 CORs have documented implementers' compliance of USAID's Marking and Communications requirements for both projects. Documentation of compliance is available in the project files.

Plan of Action and Timeline

Action completed.

Appendix III – Status of New Settlement Awards as of July 2013

Contractor/ Implementing Partner	Description of Work to be Performed	Award Amount (\$ million)	Period of Agreement	Status
Habitat for Humanity International	Technical assistance to local authorities and establishment of community management committees	4.8	June 2011 to April 2013	Completed
CEEPCO Contracting LLC	Surveying, engineering design, and environmental assessment for the Caracol-EKAM settlement	0.6	June 2011 to August 2011	Completed
CEEPCO Contracting LLC	Site development and construction management for Caracol-EKAM settlement	12.7	September 2011 to August 2013	Extended
PHS Group Inc.	Engineering services for 6 planned settlements in Croix Des Bouquets and Cabaret municipalities (2,720 housing sites)	3.9	December 2011 to August 2013	Extended
PHS Group Inc.	Design, engineering, and construction management for 7 planned settlements in the Cap Haitien development corridor (estimated 3,500 plots at seven sites)	4.2	December 2011 to March 2014	Extended
THOR Construction Inc.	Construction of 750 houses at Caracol-EKAM settlement	18.0	April 2012 to September 2013	Extended
CEMEX Haiti	Construction of 156 houses at DLA 1.5 settlement	6.6	April 2012 to August 2013	Extended
Total		50.8		

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